

WHAT IS CLAIMED IS:

1. A rock drill bit for percussive drilling comprising a drill head carrying rock-removing members at a rock-removing end thereof, the drill head having a plurality of external grooves formed therein and extending generally in an axial direction of the drill head for conducting cuttings; lands defined between adjacent pairs of the grooves and extending generally in the axial direction; the drill head further including a connecting structure adapted to connect the drill head to a drill rod; the lands including rear end portions defining respective retrac teeth; each retrac tooth having at least one cutting edge, a chip surface, and a clearance surface; the chip surface and the clearance surface forming therebetween an edge angle no greater than 100°.

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2. Rock drill bit according to claim 1 wherein the edge angle is not greater than 90°.

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3. Rock drill bit according to claim 1 wherein the first cutting edge is formed by an intersection between the chip surface and the clearance surface, each retrac tooth including a second cutting edge defined by an intersection between the chip surface and a substantially partially conical rearwardly facing end surface of the retrac tooth, wherein the end surface is arranged axially inside of and radially outside of a rearwardly facing stop face of the drill bit, an angle defined between the first and second edges being obtuse.

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4. A rock drill bit according to claim 1 wherein the structure for connection of the rock drill bit to a drill rod comprises an internal female thread and a front stop face arranged adjacent to a bottom of the female thread.

5. Rock drill bit according to claim 1 wherein each groove is
asymmetrically arranged in relation to a line oriented parallel to a center axis
of the bit and comprises a first chip surface and a second chip surface
arranged substantially perpendicular to each other.

5 6. Rock drill bit according to claim 3 wherein the rear stop face is
situated spaced-apart from, and adjacent to, the retrac teeth.

10 7. A method for the manufacture of a rock drill bit for percussive
drilling, the bit being machined from a cast workpiece to include a forward
rock-removing section and an axially opposite rearward connecting section
adapted for connecting the bit to a drill rod, the connecting section including
a recess having an internal screw thread; cooling medium channels
extending through the bit from the recess to a front end of the rock-removing
section; the method comprising the steps of:

15 A) performing a turning operation on the workpiece at an exterior of
the connecting section to generate a rearwardly facing end surface
that is inclined toward the rock-removing section at an acute angle
relative to a plane oriented perpendicular to a center axis of the bit;
and

20 B) milling external grooves in the workpiece for conducting cuttings,
wherein the exterior grooves extend along the rock-removing section
and the connecting section and defining lands therebetween that
have ends facing rearwardly to define respective retrac teeth having
cutting edges extending generally axially along an envelope surface
of the bit.

8. Method according to claim 7 wherein during step A a stop face is generated that is concentric with and positioned outside the end surface, and which is perpendicular to the center axis of the rock drill bit.

9. Method according to claim 7 further including the step of
5 removing some of the retrac teeth by a subsequent machining step.

10. Method according to claim 9 wherein the retrac teeth are removed by a milling procedure.